

WHAT IS CLAIMED IS:

1. A lens apparatus, comprising:

a lens unit that can be moved in a direction of an
5 optical axis;

a light-blocking unit having a plurality of light-
blocking members forming an aperture portion through which
light passes; and

a body structural member constituting a portion of a
10 main body of the lens apparatus;

wherein the light-blocking unit and the body
structural member are moved relative to one another in the
direction of the optical axis in accordance with a movement
of the lens unit; and

15 wherein an aperture diameter of the aperture portion
is switched by moving the body structural member between a
first position in which the light-blocking members are
prevented from opening beyond a predetermined aperture
diameter, and a second position in which the light-blocking
20 members are allowed to open beyond the predetermined
aperture diameter.

2. The lens apparatus according to claim 1,

wherein at least one of the plurality of light-
25 blocking members comprises a protrusion that protrudes out
of the light-blocking unit when that light-blocking member
is opened beyond the predetermined aperture diameter; and

wherein, when the body structural member is in the first position, the light-blocking members are prevented from opening beyond the predetermined aperture diameter by the body structural member abutting against the protrusion.

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3. The lens apparatus according to claim 2,

wherein the light-blocking unit comprises a first light-blocking member having a first protrusion extending in a direction perpendicular to the optical axis, and a
10 second light-blocking member having a second protrusion that is longer than the first protrusion in the direction perpendicular to the optical axis; and

wherein the body structural member comprises:

a first contact portion which extends in the
15 direction of the optical axis and which is abutted by the first protrusion when the body structural member is in the first position; and

a second contact portion, which is shorter in the direction of the optical axis than the first contact
20 portion and which can be abutted by the second protrusion when the body structural member is in the second position.

4. The lens apparatus according to claim 2,

wherein the body structural member has a
25 substantially cylindrical shape;

wherein at least one of the light-blocking members has a curvature at the tip of the protrusion, and the

curvature radius at that tip is smaller than the curvature radius of the body structural member.

5. The lens apparatus according to claim 1,

5 wherein the body structural member comprises a first contact portion and a second contact portion, which extend in the direction of the optical axis and which is abutted by different light-blocking members of the plurality of light-blocking members, respectively when the body
10 structural member is in the first position; and

wherein the second contact portion is longer than the first contact portion in the direction of the optical axis, and is disposed further away from the optical axis than the first contact portion at a region at the front of the
15 second contact portion.

6. The lens apparatus according to claim 1,

wherein a front end portion of the body structural member has a slanted surface that faces the optical axis.

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7. The lens apparatus according to claim 1,

wherein a plurality of reflection suppressing projections that suppress reflection of light toward an image plane side are formed in an inner circumferential
25 surface of the body structural member; and

wherein the reflection suppressing projections that are formed in regions against which the light-blocking

members abut extend in a direction that obliquely intersects with a plane in which the light-blocking members move.

5 8. The lens apparatus according to claim 1,

wherein the body structural member guides the light-blocking unit in the direction of the optical axis.

9. A camera, comprising:

10 a lens apparatus according to claim 1;

an image pickup device that receives light that has passed through the aperture portion formed by the plurality of light-blocking members and photoelectrically converts an image formed by the lens apparatus.

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10. The camera according to claim 9,

further comprising a control circuit that controls a drive of an illumination unit that irradiates illumination light onto an object;

20 wherein the lens apparatus switches the aperture diameter of the aperture portion in a first object distance region to the smaller aperture diameter in a second object distance region in a predetermined zoom position by changing a relative position between the light-blocking unit and the body structural member; and

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wherein the control circuit lets the illumination unit irradiate the illumination light when an image is

taken at the second object distance region.